

June 8, 2012

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Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: **Ex Parte Notice – SoundBite Communications, Inc., Petition for Declaratory Ruling in CG Docket No. CG 02-278**

Dear Ms. Dortch:

On June 6, 2012, representatives of organizations collectively representing thousands of businesses and organizations met with Commission staff and with legal advisors for Commissioner Pai and Commissioner Rosenworcel. The group of representatives urged the FCC to expeditiously confirm the following: in the narrow and limited circumstance when a subscriber initiates a text message choosing to opt-out of receiving future text messages, the one-time immediate text reply to confirm the opt-out is not a violation of the Telephone Consumer Protection Act (“TCPA”) or Section 64.1200 of the Commission’s rules. The group emphasized that without such a clarification, the tens of millions of confirmatory opt-out messages that have been sent out over the past four years by thousands of organizations, including those sent by the FCC, USA.gov, other government organizations, political campaigns, and the vast majority of both for-profit and non-profit organizations, are exposed to wasteful and harassing class-action lawsuits that seek to extort millions of dollars from organizations sending a one-time confirmation receipt costing some small percentage of consumers at most twenty cents. Finally, the group emphasized that such a clarification is not only correct under the law, but is a matter of simple, common sense.

The representatives of the group included Monica Desai and Ryan King of Patton Boggs, LLP, counsel to SoundBite Communications, Inc., SoundBite executives Robert Leahy (Chief Operating Officer and Chief Financial Officer) and John Tallarico (Vice President, Product Management), Krista Witanowski (Assistant Vice President, Regulatory Affairs for CTIA -The Wireless Association®), Rich Fruchterman (Associate General Counsel for Neustar, Inc.), Michael Becker (Managing Director, North America, for the Mobile Marketing Association), Genie Barton (Vice President and Director Online Interest-Based Advertising Accountability Program and Mobile Marketing Initiatives for the Council of Better Business Bureaus, Inc.), Virginia O'Neill (Senior Counsel, Center For Regulatory Compliance for the American Bankers Association), and Jeffrey Bloch (Associate General Counsel for the Consumer Bankers Association).

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Various members of this group participated in three separate meetings with Commission staff. The first meeting was with individuals from the Consumer and Governmental Affairs Bureau, including: Kris Monteith (Acting Bureau Chief), Mark Stone (Deputy Bureau Chief), Kurt Schroeder (Acting Chief, Consumer Policy Division), Michael Jacobs (Senior Legal Advisor to the Bureau Chief), and Richard Smith (Special Counsel); and from the Office of General Counsel, including: Diane Griffin Holland (Deputy Associate General Counsel), Marcus Maher (Assistant General Counsel) and Raelynn Remy (Attorney-Advisor). The second meeting was with Joe Cavender (Legal Advisor to Commissioner Rosenworcel) and Priscilla Delgado Argeris (Legal Advisor for Wireline Issues to Commissioner Rosenworcel). The third meeting was with Gene Fullano (Acting Legal Advisor to Commissioner Pai).

Participants addressed several topics during the meetings, including: (1) why the Commission should not distinguish TCPA liability based on whether a confirmatory opt-out is sent through a Free-to-End User (FTEU) text message or a Standard Rate text message; (2) the unique viewpoints of major industry players underscoring the urgent need for expeditious Commission action on this issue; (3) citations to research supporting the basic notion that consumers value receiving confirmation of their transactions; (4) there is bi-partisan Congressional support for sending one-time, confirmatory opt-out messages; and (5) in the United States, as of December 2011, 193.1 billion text messages are exchanged monthly making text messaging one of the most accepted and ubiquitous mediums in the country.

(1) The FCC Should Not Distinguish Between Free-to-End User Text (FTEU) Messages and Standard Rate Text Messages in Evaluating TCPA Applicability.

The group reiterated that the FCC should not evaluate TCPA compliance based on whether or not the text is ultimately FTEU. That distinction does not make a difference under the legal theories presented by SoundBite and others in support of SoundBite's Petition. As a practical matter, industry-wide, the vast majority of text messages sent to consumers apply standard rates, including the messages cited as examples in SoundBite's comments, such as from the FCC, the Center for Disease Control, US Fish & Wildlife Service, the History Channel, Obama for America, Romney for President, USA.gov, Consumers Union, and others. If the Commission declares that only free-to-end user confirmation text messages fall outside the scope of the TCPA, all of the tens of millions of standard rate text messages that have been sent over the past four years confirming an opt-out prior to the ruling – sent pursuant to the recommendations of the MMA and requirements of carriers – may be vulnerable to litigation. Thus, such a distinction would very likely exacerbate the number of lawsuits filed as plaintiff attorneys seek to capitalize on the ruling's implications for past practices.

Moreover, the group reiterated that relatively few consumers actually get "charged" a separate individual fee for an individual separate text message. There are a wide variety of plans that consumers subscribe to, including those that involve unlimited messaging or large buckets of texts.

Indeed, under the majority of such plans there is no separate charge for most texts. Sprint, AT&T, Verizon Wireless and T-Mobile charge the relatively few post paid consumers who do not have texting in a monthly plan only twenty cents per standard message.¹ And, the group noted that as a matter of common sense, consumers subscribing to plans with unlimited messaging or with large buckets of texts are more likely to sign up for text alerts than those paying individually for messages. As a result, those subscribers receiving an opt-out confirmation after they have opted out of a text campaign are less likely to be those subscribers who may be charged an individual fee of up to twenty cents.

The group also reiterated that it would be a perversion of the TCPA and contrary to its purposes to find that its liability provisions, which generally assess \$500 to \$1500 for each individual violation, would apply to a confirmatory opt-out message – a consumer-friendly message recommended under the MMA Consumer Best Practices, required by carriers, required by the Florida State Attorney General, and being sent as a matter of course, applying standard rates, by the United States Federal Government in addition to a range of consumer organizations, non-profit organizations and for-profit entities. It would be punitive and wholly disproportionate to subject organizations to the millions of dollars it costs to defend and settle litigation related to a one-time text message confirmation receipt that usually costs in most cases nothing, but no more than twenty cents additional to some consumers.

The group explained it would be unworkable, as a practical matter, to assess TCPA liability based on whether or not a message is FTEU. FTEU is relatively new, starting back in 2007 in an effort to use text messaging for debt collection purposes without having the debtor having to pay additional fees. The practice did not begin to gain wide acceptance until two to three year ago, and the group noted that carrier support of FTEU is limited. Most carriers do not currently support FTEU. Only the largest carriers – AT&T, Verizon Wireless, Sprint, T-Mobile and MetroPCS – have invested the money and resources to support FTEU.

Even if the thousands of organizations currently sending texts via standard rates were able and willing to invest money and resources to change their systems in order to be able to send FTEU messages to subscribers, the majority of carriers do not even support FTEU messages. For

¹ See Sprint, Sprint Services – Texting, [http://www.t-mobile.com/shop/addons/services/information.aspx?passet=messaging&tp=svc tab textmessaging](http://www.verizonwireless.com/b2c/explore/?page=text-plan; T-Mobile, Text Messaging Value Bundles | Mobile Phone Texting Bundles | T-Mobile, <a href=).

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example, the following carriers do not currently have systems set up that can support FTEU messages: ACS Wireless, Alltel, All West Communications US, Appalachian Wireless, Bluegrass Cellular, Boost, Carolina West, Cellcom, Cellular One, Cellular South, Centennial Wireless, Chat Mobility US, CTC US, Cincinnati Bell, Cox Wireless, Cricket Communications, Element Mobile, Epic Touch US, Farmers Mutual Telephone Co US, GCI Communications, Golden State Cellular, Illinois Valley Cellular, Immix Wireless, Inland Cellular, iWireless, Mobi PCS Wireless US, Mosaic Telecom US, Cellular One of NEPA, Nex-Tech Wireless, Nextel, Northwest Missouri Cellular US, nTelos Wireless, Nucla-Naturita Telephone Co US, Panhandle Telecommunications US, Peoples Wireless US, Pioneer Cellular US, Plateau Mobile, Pocket Com USA, Revol Wireless US, Silver Star PCS US, Symmetry Wireless US, Snake River PCS US, South Central Communications US, Sprocket Wireless US, Strata Networks US, Simmertty US, Syringa Wireless US, Thumb Cellular, Tracfone, Union Wireless US, United Wireless, US Cellular, Virgin Mobile USA, Viaero Wireless, and West Central Wireless.

Moreover, the group explained that implementing FTEU messages can pose a significant cost burden on entities – and in particular on small companies, non-profits, and cash-strapped government agencies. One of the larger wireless providers, for example, charges an aggregator \$20,000 per month to run a FTEU short code on their system. The additional \$120,000 per year could be cost prohibitive. In the alternative, in some case companies and organizations are charged directly for each FTEU message sent, and that cost varies, ranging from eight to twelve cents per FTEU message sent.

In addition, as SoundBite explained, standard rate messages and FTEU messages cannot be sent using the same short code. As a result, if the FCC chose to distinguish between FTEU and standard rate messages for purposes of TCPA liability, companies running text message campaigns using standard rate messages that choose to continue sending confirmatory opt-outs would then have to send an FTEU opt-out over a different short code. If the consumer received the confirmatory receipt back from a different short code number, this could potentially cause consumer confusion – particularly if the mobile marketer employs a vanity short code to send messages that are part of the campaign. SoundBite currently does not have any campaigns that use a mix of standard rate and FTEU messages in the same campaign, and is not aware of any entity that does.

(2) Major Organizations Representing Thousands of Companies Urge the Commission to Quickly Clarify that a Single Confirmatory Opt-Out Text Message Does Not Violate the TCPA. The Practice Is Widespread, Expected By Consumers, and in the Public Interest.

Organizations collectively representing thousands of entities that send text messages voiced unanimous support for SoundBite's Petition:

SoundBite: SoundBite responded to questions regarding FTEU versus standard rate messages and provided a general overview of the mounting pressure class action litigation is putting on the company. SoundBite emphasized that its litigation fees alone for defending class actions lawsuits involving opt-out confirmations could be approximately one million dollars this year – a very

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significant amount of money for a company its size.

SoundBite further explained that because dozens of wireless carriers do not support FTEU, as discussed above, it would be extremely difficult, if not practically impossible, to require that all confirmatory text messages be free. In addition, SoundBite pointed out that social media providers such as Twitter usually do not have a relationship with organizations, such as the FCC, that use Twitter's service to send out messages to consumers. SoundBite is unaware of any mechanism that Twitter could use to charge organizations for sending out FTEU confirmatory text messages. As a result, it appears that Twitter would have to internalize those costs or stop sending messages over the text channel.

Because of all of these reasons – the costs involved to the entities sending the texts, the fact that most carriers have not implemented the system requirements for FTEU, and confusion to the consumers and costs related to setting up a separate short code message for standard rate campaigns versus FTEU campaigns – SoundBite emphasized that such a distinction for TCPA liability is unworkable. SoundBite further stated that if the FCC mandated FTEU messages for opt-out confirmation, it would not be able to comply with the FTEU mandate and would be forced to stop running standard rate campaigns.

CTIA -The Wireless Association®: CTIA discussed why confirmatory text messages are good public policy. CTIA explained that a confirmation receipt lets the consumer know that the opt-out request was received. CTIA audits and monitors implementation of MMA Consumer Best Practices - which CTIA believes is the right approach. CTIA discussed that consumers that have not received a confirmatory text message may be more likely to call the wireless carrier to confirm the opt-out, even though the wireless carrier did not directly participate in sending the text messages or otherwise have information about the opt-out.²

CTIA raised the question of what the FCC planned to do about the fact that it sends confirmation opt-outs using a standard rate via Twitter.

CTIA further pointed the staff to paragraph 93 of 2003 TCPA Order in which the FCC specifically directs that an entity receiving an opt-out request for a call should confirm that any such request will be recorded at the time the request is made by the consumer.³

Neustar: Neustar manages the Common Short Code registry for CTIA. Neustar explained that because of concern about the overall consumer experience and, in particular spam, all A2P texting is

² CTIA confirmed that they do not keep records of whether carriers have received increased contact from customers that do not receive confirmatory text messages because CTIA advises mobile marketers to follow the MMA Consumer Best Practices, which require such confirmatory messages.

³ See *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, Report and Order, FCC 03-153, 18 FCC Rcd 14014, 14069 ¶ 93 (2003) ("2003 TCPA Order").

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supposed to occur through the Common Short Code program through which there is rigorous oversight. Neustar reviews the applications of all Common Short Code users in the first instance, and the individual carriers review the details of each campaign before allowing a campaign to go forward on their networks. On the back end, CTIA monitors the campaigns to ensure that they are in compliance with the rules and guidelines, including the MMA's Consumer Best Practices. Among other things, the CPB includes the requirement that consumers receive confirmation of their opt-out messages. Neustar emphasized that carriers have adopted this approach, which includes sending confirmatory text messages, out of a desire to ensure that consumers have a good experience, and to protect consumers from spam and fraudulent activity.

In response to questions about the legal theory for granting SoundBite's request, Neustar pointed to Verizon's comments⁴ in this docket that emphasized that a confirmatory text message is part of the campaign. Therefore, when the consumer consents to participate in the mobile campaign, she consents to receive a confirmatory text message. Revocation of consent is not complete until the consumer receives a confirmatory text message.

Council of Better Business Bureaus (Council): The Council explained that the BBB Mobile Giving Foundation (MGF) allows charitable donations through mobile devices. The Council explained that charitable giving over the mobile device is an important way to donate and has allowed many charities to reach broader audiences at low cost, spurring charitable giving. Over \$50,000,000 in \$5 and \$10 donations has been raised in support of hundreds of qualified charities.

The Council discussed how confirmation text messages provide transparency and protect against fraud for charitable giving. While MGF does not charge the end users for receiving a text message, rising costs to business of participating in campaigns negatively impact charitable giving – with little benefit to consumers when compared to the harm to businesses of having to defend class action lawsuits.

The Council emphasized that a consumer receipt of the donation is important to the consumer experience and the transparency and accuracy of the transaction as it completes the arch of the transaction. As a best practice, the donor receives a response from a short code after making a pledge. MGF has a four-step double opt-in process with a fifth step that asks for opt-in permission for the charity to contact the donor. This fifth message is the final message that terminates the engagement between the MGF and the mobile device, but importantly, in the fifth message the donor is asked if she would like to receive additional information on the charity or how their gift is being used. If the donor replies yes, then they have opted in to receive information alerts from the charity.

American Bankers Association (ABA): ABA explained that it represents banks of all sizes and charters and is the voice for the nation's \$14 trillion banking industry and its two million employees.

⁴ See Comments of Verizon and Verizon Wireless, CG Docket No. 02-278, at 4 (filed Apr. 30, 2012).

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The majority of ABA's members are banks with less than \$165 million in assets. ABA emphasized that text messages are growing in importance as a means of communication between banks and consumers, particularly as consumers (and consumer advocates) expect real time access to account information.

Text messages permit banks to reach consumers with important and timely information about their accounts that may help a consumer take protective action or avoid fees. Many banks provide their customers with the opportunity to opt-in to the following kinds of informational text messages: suspicious activity alerts; breach notifications; reminders that a payment is due (helping the consumer avoid late fees and/or interest rate increases); and low balance alerts (helping the consumer avoid overdraft fees. ABA explained that in February 2012, the Consumer Financial Protection Bureau (CFPB) published a request for information on overdraft practices and specifically requested information from the public on low balance alerts, suggesting the CFPB's interest in increasing industry use of low balance text alerts.

ABA noted that the banking industry has been a target of recent class action litigation related to confirmatory opt-outs. This litigation wastes resources and confers no benefit on consumers. In addition, this growing threat may serve as a deterrent to banks currently considering providing their customers with beneficial, informational text messages.

Because the text alerts that banks are sending to their customers relay important account information, upon receipt of an opt-out message, the banking industry believes that it is essential to send a confirmatory text. The confirmatory opt-out receipt notifies the consumer that the bank will stop sending alerts and information – which is particularly important if those alerts have been fraudulently turned off by a person intending to defraud the subscriber.

Consumer Bankers Association (CBA): The CBA raised concerns that banking regulators, most notably the CFPB, support banks that communicate with their customers by way of text messaging, including the sending of confirming text messages. Bank regulators view text messaging as important in certain contexts, such as communicating with customers with regard to the use of overdraft protection. If banks were to stop sending confirmations of opt-outs, this would reduce consumer protections, which is antithetical to the intent of Dodd-Frank and the creation of the CFPB. CBA is concerned that banks may find themselves in a bind between complying with the TCPA and complying with CFPB rules and guidance that encourage text message communications. Similarly, the CFPB overall is a new, technology oriented agency, and is expected to issue numerous new rules that will require or encourage text message communications with consumers.

CBA also explained that the CFPB will lean even more favorably towards text message communications if consumers express preference for this type of communications, and if other data the agency collects supports that this is the best, or one of the best, means to communicate with consumers.

CBA reiterated that there may be a security concern for consumers. If banks stop sending

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confirming texts in an effort to avoid TCPA litigation, then a fraudster could potentially hijack an account, send a text message to the bank under the consumer's name to stop further text messaging, and then steal funds or commit other fraud, without the consumer receiving, for example, a low balance or other suspicious alert. One tool that could prevent this potential is through a confirming text message. CBA also expressed concern about inadvertent opt-outs that would result in the consumer being inadvertently opted-out of a service.

Mobile Marketing Association (MMA): The MMA emphasized that it took many years of hard work and careful thought by hundreds of companies to develop and draft the MMA Consumer Best Practices. The process resulted in a detailed, 140-page document that CTIA ultimately incorporated into the industry self-regulatory requirements.

MMA emphasized that subscribers to text message campaigns specifically opt-in to receive the types of information offered by that campaign. Responding to a question that raised the issue of why some subscribers may choose to stop receiving text messages from a particular campaign, MMA further emphasized that there are numerous reasons why a consumer may then choose to "STOP" receiving such messages. For example, they may be finished with a particular service or may be temporarily turning a service off in connection with an overseas trip, perhaps to avoid international text roaming charges. Consumers benefit from knowing that their "STOP" message has been received and will be acted upon.

MMA underscored that if the FCC does not grant SoundBite's Petition, many marketers will decide that the uncertainty and potential liability is too great and will stop using text messaging to reach consumers all together. MMA also explained that in many cases the company whose product is being marketed does not have a direct relationship with the wireless carrier, but instead has a relationship with an application provider, who has a relationship with an aggregator, who then has the relationship with the carrier. This means that it is nearly impossible for many marketers to provide FTEU confirmatory text messages. In addition, MMA supported arguments that any prior opt-in to receive text alerts assumes consent to receive confirmatory text messages.

(3) Studies Reflect that Consumers Value Receiving Transaction Confirmations and Receipts.

The group emphasized that not only is the practice of sending confirmatory opt-out texts widespread, but research demonstrates that "transaction confirmation is shown to be important to customers."⁵ In one study, confirmation of a transaction with a separate SMS confirmation scored the highest mean attitude score compared to other kinds of confirmations.⁶ In fact, 99 percent of

⁵ G. Peevers, G. Douglas, D. Marshall, M.A. Jack, (2011), "On the role of SMS for transaction confirmation with IVR telephone banking", *International Journal of Bank Marketing*, Vol. 29 Iss: 3 pp. 206 – 223, 218 (Attachment A).

⁶ *See id.* at 215.

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study participants judged the confirmation text to be clear, with an overwhelming majority expressing positive views about the use of SMS confirmations as “a good idea,” “quite helpful,” “excellent,” “it provides extra confirmation and reassurance that the transaction had taken place,” and “it’s a written record.”⁷ Furthermore, marketing studies demonstrate that receiving paperless receipts and other mobile information about past purchases are valuable services for consumers.⁸ Without a receipt or transaction confirmation, there is uncertainty in whether the transaction was successfully completed which can result in a consumer expending time and resources to obtain clarification. Given the rapid growth of consumers accessing online retail sites – up 116 percent from December 2010 to December 2011 – the benefits of transaction confirmations will continue to accrue.⁹ Taken together, these findings support that providing a confirmation of an opt-out request is part of the receipt process that consumers expect and value.

(4) The Practice of Sending a Single Text Message to Confirm an Opt-Out Request Has Bi-Partisan Congressional Support.

As discussed by the group, Sen. John F. Kerry (D-MA) and Sen. Scott P. Brown (R-MA) recently sent the attached letter to Chairman Genachowski outlining the many consumer benefits derived from a one-time confirmation of an opt-out request, and their belief that such a confirmation should not be subject to TCPA liability.¹⁰ The Senators explain the value to consumers of having a receipt for their opt-out request and that a misinterpretation of the law could hurt consumers. Specifically, they stated that a confirmatory text message “ensures that the consumer has a ‘receipt’ for their opt-out request,” “ensures that the consumer knows they will not receive any future messages from a particular entity,” and is “necessary in case the consumer sent the request in error or did not actually make the request himself.” The Senators urged the Commission to not only issue a definitive ruling stating that confirmatory opt-out texts are allowable, but to encourage such confirmations to “help provide certainty for everyone engaged in mobile commerce.”

⁷ See *id.* at 216, stating that “some 67 per cent of participants gave positive views about the use of SMS confirmations ...”.

⁸ See Attachment B: “Mobile Travel Services Used by Business Travelers and/or Valuable to Corporate Travel Managers Worldwide” in “Upwardly Mobile: The Next Step for Travel Management,” Amadeus and Association of Corporate Travel Executives (ACTE) (July 2008); “Top Features of In-Store Mobile Apps According to US Smartphone Owners” in “The Mobile Shopping Survey Series,” AisleBuyer (March 23, 2012); “Mobile Features that Luxury Sales Professionals Can Use to Enhance In-Store Shopping According to US Affluent Smartphone Owners” in “Mobile Apps and Commerce for Luxury Brands,” Luxury Institute and Plastic Mobile (April 24, 2012).

⁹ See “The Rise to Prominence of the Mobile Channel – and Mobile’s Additive Impact Across the Media Landscape,” MMA Educational Series (April 17, 2012).

¹⁰ Letter from Senator John F. Kerry and Senator Scott P. Brown, United States Senate, to Chairman Julius Genachowski, Federal Communications Commission, dated April 13, 2012 (Attachment C).

(5) Explosive Growth of Social Media.

Mobile Marketing is a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network.¹¹ The mobile channel consists of eight unique media paths, including: text and multimedia messaging, email, voice, applications, browsers, content and proximity media. The ubiquitous, broad reach, interactive and real-time nature of text messaging makes it most suitable for mass-market continuant engagement. Unlike the other mobile media channels, text messaging does not require high-end smartphones, which only have an estimated 45.9% of market penetration.¹² Nor does text messaging require the consumer to subscribe to a data service plan. Moreover, text messaging has the broadest market reach of all mobile media in that it may be effectively employed across nearly all carrier networks (pre and post paid) and mobile phones.

Today, text messaging is the most widely used of all mobile media by consumers. It is estimated that there are over 3 billion text messaging users worldwide.¹³ In the United States, as of December 2011, 193.1 billion text messaging are exchanged monthly,¹⁴ up from roughly 300 million in the entire month of May of 2003. Furthermore, in the United States, 31.6% of the 234 million mobile subscribers 13+ years old use text messaging to access a wide range of content: social networking, search, news, weather, sports, banking, restaurant information, etc.¹⁵ Finally, Juniper Research estimates that by 2016 commercial text messaging (also referred to as application-to-person (A2P) messaging) will overtake person-to-person (texting) messaging, being worth more than \$70 billion. Again, A2P messaging includes a wide range of services and sectors, including financial services, advertising, marketing, business administration, ticketing, and television voting.¹⁶

¹¹ Mobile Marketing Association, *MMA Updates Definition of Mobile Marketing*, (Nov. 17, 2009), <http://www.mmaglobal.com/news/mma-updates-definition-mobile-marketing>.

¹² comScore MobileLens Audience Profile, April 2012.

¹³ Cisco Systems Inc., *Cisco VNI Service Adoption Forecast, 2011 – 2016*, http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns1186/Cisco_VN_I_SA_Forecast_WP.pdf (last visited Jun. 7, 2012).

¹⁴ The Wireless Association (CTIA), *Wireless Quick Facts*, <http://www.ctia.org/advocacy/research/index.cfm/aid/10323> (last visited Jun 7, 2012).

¹⁵ comScore MobileLens Audience Profile, April 2012.

¹⁶ Press Release, Juniper Research, *Application Generated Mobile Texts to exceed \$70 billion Revenues by 2016, overtaking Person-to Person Messaging*, says Juniper research (May 4, 2011) available at <http://www.juniperresearch.com/viewpressrelease.php?pr=242>.

The Mobile Marketing Association (MMA),¹⁷ in an alliance with the CTIA, mobile carriers, brand marketers, and solution innovators came together in 2005 to establish the MMA Consumer Best Practices. The purpose of the MMA Consumer Best Practices is to specify the set of practices and consumer experiences the industry must employ to effectively engage consumers, including via text messaging. Initially, the coalition of authors of the MMA Consumer Best Practices focused on the rules around the use of text messaging for content (ringtones, wallpapers and games), delivery and billing. Over the next seven years, as the industry and consumer adoption of the text messaging medium grew, the MMA Consumer Best Practices evolved to address new consumer experiences and standard rate message programs.

Since the inception of the MMA Consumer Best Practices hundreds of companies, through a bi-annual review and publishing cycle, have been involved in refining and evolving the standards to incorporate the industry's latest learnings and best practices. In 2009, the individual carrier rules sets from the top four carriers were integrated into the MMA Consumer Best Practices, which created a common playbook for the entire industry. In October 2010, the CTIA was able use the MMA Consumer Best Practices to refine and consolidate the rules to roughly thirty rules for the purposes of program auditing and enforcement purposes.

The intent of all of the rules and guidelines found within the MMA Consumer Best Practices and with the CTIA auditing playbook is to ensure an optimal consumer experience. For instance, a founding tenant of the standard is that all marketer-initiated communication with a mobile subscriber via text messaging must be preceded by the consumer first opting in and giving consent to receive the messages. Furthermore, the MMA Consumer Best Practices provide that if a mobile subscriber chooses to suspend their receipt of text messaging delivered content they may do so by opting out. Upon receiving the opt-out request, the MMA Consumer Best Practices call for the marketer (often via their contracted messaging service provider) to respond to the opt-out request by sending a confirmation receipt of the opt-out to the subscriber, thus concluding the transactional or communication exchange with the mobile subscriber.

It is the group's position that this process, including the confirmatory opt-out message, provides the most effective subscriber experience and is in the best interest of both the consumer and the organization alike.

¹⁷ The Mobile Marketing Association, founded in 2003, is a global trade association representing over 750 companies across the entire mobile marketing industry ecosystem, including: brand marketers and retailers, agencies, publishers and advertising networks and the spectrum of mobile solution innovators. The MMA has 700+ members worldwide with over 350 headquartered in the United States. The MMA member companies in turn represent thousands of organizations that are effectively leveraging the mobile channel to interact with their prospects, customers, investors, employees and related constituents for the purpose information and mutual value exchange.

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Respectfully submitted,



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ATTACHMENT A



International Journal of Bank Marketing

Emerald Article: On the role of SMS for transaction confirmation with IVR telephone banking

G. Peevers, G. Douglas, D. Marshall, M.A. Jack

Article information:

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Bedman Narteh, Nana Owusu-Frimpong, (2011), "An analysis of students' knowledge and choice criteria in retail bank selection in sub-Saharan Africa: The case of Ghana", International Journal of Bank Marketing, Vol. 29 Iss: 5 pp. 373 - 397

<http://dx.doi.org/10.1108/02652321111152909>

Shirshendu Ganguli, Sanjit Kumar Roy, (2011), "Generic technology-based service quality dimensions in banking: Impact on customer satisfaction and loyalty", International Journal of Bank Marketing, Vol. 29 Iss: 2 pp. 168 - 189

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On the role of SMS for transaction confirmation with IVR telephone banking

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Abstract

Purpose – The purpose of this paper is to deliver empirical results on the effects of (out-of-band) short message service (SMS) confirmation messages after transactions have been completed in an automated interactive voice response (IVR) telephone banking service. The research seeks to discover if SMS confirmations have a positive effect on customer relationship to furnish evidence for a proposed business case for a multi-channel banking service. The paper aims to offer results on customer attitude on the role of SMS with IVR as a multi-channel customer relationship management (CRM) strategy in digital banking.

Design/methodology/approach – The methodology is an empirical study based on a controlled laboratory experiment using bank customers as participants. Questionnaires and user observation techniques were employed to collect quantitative and qualitative data, which were analysed using repeated measures ANOVAs.

Findings – Transaction confirmation is shown to be important to customers – whether by an SMS message or within the IVR telephone call itself. Customers judged the role of SMS for CRM as highly desirable after monetary transactions; they prefer the version of the IVR banking service that provides (out-of-band) SMS confirmation compared to one that does not – and they judged it significantly higher for quality. However, there were no significant differences detected between customer attitude scores for usability of IVR calls involving funds transfers with, or without, an SMS confirmation. As a consequence, the business case was only developed as far as inclusion of transaction confirmation within the IVR call itself, and not extended to use of SMS.

Practical implications – Implications from the results are offered as management insights for the financial services sector in seeking integrated mobile CRM strategies, or “next call avoidance” strategies.

Originality/value – The paper reports findings from a controlled experiment with 116 participants that was based on extension of an existing IVR telephone banking service with which they were all familiar as users.

Keywords Telephone banking, Service industries, Automation, Interactive devices, Mobile communications systems

Paper type Research paper



1. Introduction

The continuing widespread advances in computer technologies have encouraged many banks to adopt new methods of interacting with customers to improve customer service, to lower costs and to maintain competitive advantage; and from a customer point-of-view, to offer more convenient methods of banking. Banks are now committed to making available customer services that have traditionally involved interacting

with branch staff, using different digital channels such as interactive voice response (IVR) telephone banking or internet banking, encouraging customers to contact them using such digital (direct) channels, rather than by person-to-person contact. Banks also seek to identify strategies for 'next call avoidance' that might eliminate situations where the customer telephones the bank purely to seek reassurance in confirming that a recent transaction has indeed been processed. One such potential new technology is mobile phone banking (m-banking) and this paper offers results from a controlled experiment, involving integrating short message service (SMS) features with an existing IVR telephone banking service as a new way of delivering (secure, out-of-band) transaction confirmation messages. The aims of the experiment were to investigate the impact on customer attitudes and the impact on customer relationship of introducing SMS confirmations after IVR telephone banking transactions in order to build a business case for deployment; and to gather data on the acceptability of integrating an SMS channel with an existing IVR digital banking channel.

1.1. Mobile banking

Mobile banking services allow customers to carry out banking transactions such as balance enquiries, ordering cheque books, and completing funds transfers, using a mobile device. Mobile banking, m-banking, is a general term that can be applied to a number of methods for enabling customers to use their mobile device to perform banking actions. These include accessing the internet directly using a micro-browser on a mobile phone, as well as SMS banking with downloadable applications and software clients. The mobile phone offers banks enormous potential as a service channel because of their ubiquity, and m-banking can help banks to retain existing technology-savvy customers by providing value-added, innovative services whilst at the same time attracting new customers (Tiwari *et al.*, 2007).

SMS, or text messaging, as it is commonly known, is still a significant growth area in mobile communications. It is estimated (Martin, 2010) that worldwide 4.1 trillion (UK trillion) text messages were sent in 2008. The Mobile Data Association (MDA) reports that in 2008 a total of 78.9 billion text messages were sent in the UK alone (MDA, 2009), 216 million per day, and this was up 22 billion on the annual total in 2007. Research has found that text messaging is most commonly used as an effective one-to-one method of communication between friends (Sillence and Baber, 2004). Businesses have also realised that there is huge potential in SMS for carrying out business activities, and for individual communication with customers. It was estimated, by market research group Radicati, that in 2004, 55 per cent of text messaging was for business use, with much further growth to come (Faulkner and Culwin, 2005). SMS banking services have already been successfully implemented by banks in Asia, the Middle East and South Africa, with both push (automatic) and pull (customer initiated) services offered to customers (Rumpa, 2005). There has however, only been limited research on customer impact of SMS banking (Peevers *et al.*, 2008), one of the drivers for the experiment reported here.

The advantages of mobile banking are its convenience, offering access to banking, no matter what the location or time; and its efficiency (Laukkanen, 2007; Jarvenpaa *et al.*, 2003; Suoranta, 2003; Tiwari and Buse, 2007; Kanniaien, 2010). In spite of these advantages, some authors (Lee and Chung, 2009; Pousttchi and Schurig, 2004) have remarked on the slow development of the market for mobile banking. In countries such

as Korea, Finland, and Taiwan studies have shown the usage levels of mobile banking are lower than predicted (Laukkanen, 2007; Lee and Chung, 2009; Luarn and Lin, 2005). What are the factors preventing large-scale adoption of mobile banking? Research has shown that customers worry about how much it will cost (Luarn and Lin, 2005); and worry about the security of the service (Brown *et al.*, 2003; Luarn and Lin, 2005), although some observers (Laukkanen, 2007; Laukkanen and Lauronen, 2005; Suoranta, 2003) have argued that security concerns are not a prohibitive issue. Customer communication has also been recognised as a key factor in adoption of m-banking (Laukkanen and Kiviniemi, 2010). The perceived complexity of mobile banking is also argued to be a cause of low usage levels (Lee *et al.*, 2003) and it has been argued (Lee and Chung, 2009) that trust is one of the most important factors in the low adoption of mobile banking, and is the factor that most impacts on customer satisfaction with this banking channel. Trust has an impact on level of adoption in all forms of digital banking (Aladwani, 2001), and has been researched extensively (Grabner-Krauter and Kaluscha, 2003; Kim and Prabhakar, 2000; Kim and Moon, 1998; Suh and Han, 2002; Koenig-Lewis *et al.*, 2010). The research reported here sought to explore if the use of (simple) SMS messages from the bank on their mobile phone might serve to reduce the impact of these limiting factors for m-banking services in general.

It has also been found that older users have usability problems with texting on mobile phones (Kurniawan, 2008; Ornella and Stephanie, 2006; Peevers *et al.*, 2008). Older users have been found to be passive users of mobile phones, and can find the process of text messaging intimidating (Kurniawan, 2008). By the same token, it has also been found that ease of use has a stronger influence on female users than on male users (Riquelme and Rios, 2010). As a consequence, the research reported here was carefully planned to include a balance of male and female participants and equal numbers of older and younger users.

1.2. Context for the research

The existence of a relationship between service quality and satisfaction is well accepted in the banking sector (Ennew and Binks, 1999; Jamel and Naser, 2002; Hooi Ting, 2004). The aim of this research was to derive objective, empirical results on the impact on the customer experience of introducing SMS confirmations on funds transfers in an IVR telephone banking service. If a bank can successfully furnish SMS messages to confirm transactions carried out using other digital channels, and thereby remove the propensity for customers to speak to an advisor ("next call avoidance") in order to enquire/double-check transaction details, this could result in cost reductions for the bank and a better user experience for the customer with additional convenience, reassurance and confidence.

1.2.1. Customer relationship management (CRM). SMS banking, used as a one-to-one business-to-customer communication channel, offers potential for improved customer relationship management (CRM) since SMS can also be used for marketing of a bank's services and products, confirmation of transactions made by customer with the bank via another channel (e.g. internet, telephone banking), and confirmation of contact with the bank via another channel, confirmation of appointments, complaints (actually an important issue for businesses (Fornell and Wernerfelt, 1987; Johnston and Mehra, 2002) and for preventing customer switching behaviour). An agreement on a conceptualisation of CRM is still lacking (Liljander *et al.*, 2007), but a bank's CRM

strategy can employ many channels, such as direct mail, telephone, loyalty cards and e-mails. Businesses use CRM as way to build a competitive advantage to distinguish their brand from competitors and to foster stronger loyalty from their customers (Crosby and Johnson, 2001).

SMS can be used within such a CRM strategy. Mobile CRM has been defined as:

Customer relationship management of any kind including interactive communication between an organisation and a customer using a mobile device (Liljander *et al.*, 2007).

There has, to date, been limited research into mobile banking services for CRM and the effects they will have on customers (Crosby and Johnson, 2001; Lin and Wang, 2006; Mort and Drennan, 2005; Okazaki, 2005). One study (Richardson, 2005) on customer complaint management compared multi-channel electronic banking options such as ATM, SMS banking, e-mail and a message function on internet banking. In that study, the majority of customers (72 per cent) considered SMS banking to be an appropriate channel for updating them on their complaint. Another study (Liljander *et al.*, 2007), examined mobile CRM used by an airline and concluded that customers are not ready for this type of mobile application, although they did find that participants who already used the mobile internet had a more positive attitude to mobile CRM. With such little research so far there is a need to gain further insights on CRM via mobile phones.

The term CRM is frequently used interchangeably with relationship marketing (RM) (Liljander *et al.*, 2007), defining strategies used by businesses to build and develop long term relationships with customers that are beneficial to both. In retail banking CRM has been defined as:

The activities carried out by banks in order to attract, interact with, and retain more profitable or high new-worth customers (Walsh *et al.*, 2004).

In this respect, it is often the most profitable customers that are the prime target for CRM strategies. The aims of CRM are to increase customer profitability while also providing better services for customers (Leverin and Liljander, 2006), but a CRM strategy will not always lead to a stronger relationship between a business and its customers. Research by Leverin and Liljander (2006) investigated the impact of a case bank's CRM strategy to examine if it strengthened customer relationship satisfaction and loyalty. They did not find confirmation of the positive effects of the CRM strategy, but they found that customers did perceive improvements in the banking relationship after the CRM strategy was launched. Mobile technologies and SMS in particular can perform a role in CRM for facilitating relationships, though it has been suggested (O'Loughlin *et al.*, 2004) that the increase in self-service and automated services in banking are actually further weakening these relationships.

Storbacka (1997) has suggested applying the principles of market segmentation (Smith, 1956) in a CRM context, with segmentation proposed on the basis of relationship revenue, cost, volume and profitability (Leverin and Liljander, 2006; Storbacka, 1997). The customer segment most valuable to banks is composed of their high volume, profitable customers. Anderson and Mittal (2000) note that customer relationship profitability arises through the acquisition and retention of "high quality" customers with low maintenance costs and high revenue. Customer switching behaviour in this group should be kept to an absolute minimum (Storbacka, 1997) to maintain and hopefully increase profits. Leverin and Liljander's (2006) RM survey

study was conducted on two profitability segments: the most profitable and those of mid-level profitability. They did not find any differences between the two segments on customers' evaluations of the service relationship or their loyalty towards the bank.

In what ways could m-banking benefit a bank's CRM strategy? The least valuable customer segment to a bank is composed of their low volume, unprofitable customers. The recommendations (Zeithaml *et al.*, 2001; Storbacka, 1997) for this segment are to increase the volume of this group, or find ways to alter the methods of transacting with these customers to increase relationship revenue and cut relationship costs. It is common for banks to direct the least profitable customers to self-service options to reduce relationship costs (Leverin and Liljander, 2006). Mobile banking could be of benefit in achieving an impact on the nature of transactions, and for this study the proposed SMS transaction confirmation could reduce relationship costs for a bank as a strategy for "next call avoidance". This benefit should also apply with the mid-level profitability customers, which could form the majority of the bank's customers. It could also be suggested that m-banking will appeal to a bank's businesses customers, who are likely to belong to the most valuable customer segment, as an innovative time saving service. For banks, mobile CRM is a way of developing mutually beneficial and long term relationships with this profitable group of customers. The use of Mobile CRM should also lead to an increase in customer loyalty (Fjermestad and Romano, 2003), and it may also have positive effects on the bank's brand image (Helenius and Liljander, 2005; Lam and Chan, 2003; Nysveen *et al.*, 2005). Crosby and Johnson (2001) propose that a CRM strategy must lead to a more distinct brand. Implementing innovative mobile CRM services may help a bank stand out from its competitors.

1.3 Hypotheses for this research

The experiment was based around a practical investigation of whether an SMS confirmation message received after completing a funds transfer using IVR telephone banking would improve the customer satisfaction with the IVR digital banking channel. Three (null) hypotheses were postulated for the research:

- H0-1.* There will be no differences in customer satisfaction scores for the different versions of telephone banking.
- H0-2.* There will be no differences in customer preferences for the different versions of telephone banking.
- H0-3.* There will be no differences between the participant age groups.

2. Method

2.1 Experiment design, independent variables

The experiment involved customers using a fully-realistic copy of the case bank's automated IVR telephone banking service[1] with which they were all familiar as users. The IVR service was extended for the experiment with the new SMS confirmation capability, and participants received messages on a Sony Ericsson K800i handset with a "standard" keypad. The independent variable for the experiment was the version of the IVR telephone banking experienced. The experiment involved:

- (1) calls to the current version of IVR for which there was no confirmation after funds transfer;

- (2) calls to a version of the IVR with confirmation of the updated balance within the IVR call flow itself;
- (3) calls to a version of the IVR with subsequent confirmation by SMS message.

There was also a between-participants variable controlled for in the experiment, whereby, for half of the participants in condition (3) (with an SMS confirmation message), the IVR design was as condition (1), without confirmation of the updated balance in the IVR flow; whilst for the other half of the participants the IVR design was as condition (2) with confirmation within the IVR flow such that this group had two separate confirmations, IVR then SMS. Participants experienced all of their conditions in a balanced, repeated-measures design. There were two other (participant) variables included in the design – gender and age group (45 years and under versus 46 years and over). The experiment was designed to balance for the order of experience of the independent variable (sequencing of conditions) across the participant cohort by age group and by gender.

2.2 *Dependent variables*

Customer attitude to the different channel experiences was measured using a questionnaire, and customer preference using a quality metric with preference scores.

2.3 *Usability questionnaire*

The design of the attitude questionnaire used for this experiment followed best practice (Likert, 1932) by using an equal number of negative and positive statements presented in a randomised order for each participant (on a laptop computer). The use of questionnaires to evaluate services and user interfaces has a long history (LaLomia and Sidowski, 1990; Root and Draper, 1983). The attitude questionnaire has been well-proven in previous usability research (Peevers and McInnes, 2009; Peevers *et al.*, 2009; Weir *et al.*, 2009a; b; 2008, 2007, 2006). The questionnaire used a seven-point Likert format that ranged from “strongly agree” (1) to “strongly disagree” (7). Following reversal of the polarity of negative questionnaire statements, a score of 7 consistently indicates a strongly positive attitude and 1 a strongly negative attitude. The attitude questionnaire consisted of 22 statements that address a range of cognitive and affective attributes relating to usability of the customer experience: complicated, knowing what to do, efficient, happy to use again, confused, friendly, stressed, polite, enjoyable, frustrating, flustered, easy to use, concentration, in control, need improvement, secure, reliable, rushed, liked voice, prefer to speak to human being, voice clarity and confident transaction was completed:

- Q1 I thought the service was too complicated.
- Q2 When I was using the service I always knew what I was expected to do.
- Q3 I thought the service was efficient.
- Q4 I liked the voice.
- Q5 I would be happy to use the service again.
- Q6 I found the service confusing to use.

- Q7 The service was friendly.
- Q8 I felt under stress when using the service.
- Q10 I thought the service was polite.
- Q11 I found the service frustrating to use.
- Q12 I enjoyed using the service.
- Q13 I felt flustered when using the service.
- Q14 I think the service needs a lot of improvement.
- Q16 I would prefer to talk to a human being.
- Q17 I thought the voice was very clear.
- Q18 I felt that the service was reliable.
- Q19 I had to concentrate hard to use the service.
- Q20 I did not feel in control when using the service.
- Q21 I felt confident in the security of this service.
- Q22 I felt confident my transaction was completed successfully using this service.

All participants completed the questionnaire following exposure to each of their three experiment conditions. An overall attitude score was determined from the overall mean for all of the attributes by all participants. Individual attributes were also analysed separately to analyse any specific issues that arose.

2.4 Quality metric and post experiment questionnaire

At the end of their experiment session, participants were asked which experience they preferred, and by rating their three experiences on a 0-30 linear scale they provided an overall rating as well as a rank order of preference. This type of quality metric has been successfully used in previous research (Peevers *et al.*, 2008; Weir *et al.*, 2009a, b). Participants also completed a structured exit interview to discuss their reactions to the different experiences and their likes and dislikes.

2.5 Experiment participants

The number of participants required depends upon the amount of segmentation reflected in the overall user population, for robust statistical testing, larger numbers are needed in each key demographic group, e.g. differing age groups and genders (Landauer, 1988), to lessen the impact of individual differences. Two age groups were judged ample for this work: the median age of the bank's IVR customer user group is 45. To randomise the set of six treatment orders combined with the between-subjects setting in condition (3) as described above, plus a balance for participant age group and gender, a full-factorial experiment design requires a minimum of $n = \text{six orders} \times \text{two IVR types in condition (3)} \times \text{two age groups} \times \text{two genders} = 48$ participants. A target of 96 participants was defined, to achieve an over-sampling of 2:1 in each combination. A cohort of 116 participants actually took part in the experiment. The case bank contacted a sample of 1,000 of its customers and invited them to take part in the research. They were all known

to be users of the bank's IVR service; and were all confirmed to be mobile phone owners, Some 20 per cent of the invited customers volunteered to take part and from this list the required age and gender quotas were recruited to attend for their individual one-hour experiment session. Participants were presented with an honorarium of £30.

The final cohort of participants showed near balance for gender (54 per cent female) and near balance for age group (47 per cent), Table I. The age range of the participants was 20 to 76 and the mean age was 46. A total of 110 participants provided complete data sets for the analysis.

Asked in the exit interview (as an open question), some 29 per cent of participants reported that they were unaware that their bank offered m-banking facilities. Of the others, 11 per cent were receiving SMS text alerts such as weekly balances and 2 per cent when their bank cards were used abroad. A range of reasons were offered for non-use of m-banking, Table II.

A total of 82 per cent of the cohort reported that they had sent a text message before. Those who had used text messaging were asked about their frequency of use, Table III. Some 52 per cent of these text users reported that they used predictive text (T9 or iTap); 42 per cent did not; and 6 per cent sometimes made use of predictive text when writing SMS messages.

	Age 18-45		Age 46 and over		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Males	26	22.4	27	23.3	53	45.7
Females	29	25.0	34	29.3	63	54.3
Total	55	47.4	61	52.6	116	100

Table I.
Participant demographics

Reasons	<i>n</i>	%
Not aware m-banking was available	24	29
No need for m-banking	8	10
Use internet banking in preference	22	27
Use phone/ATM/ branch in preference	7	9
Security concerns with mobile phones	4	5
Don't use mobile phone	4	5
Other issues	13	16

Table II.
Reasons for not using
mobile phone banking
services

Frequency	Number		Age 18-45		Age 46 and over	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
A few times a day or more	42	44	28	56	14	31.1
Daily	22	23	14	28	8	17.8
A few times a week	20	21	7	14	13	28.9
Weekly	5	5	0	0	5	11.1
Monthly	0	0	0	0	0	0
Less often	6	6	1	2	5	11.1

Table III.
Participants' SMS usage
frequencies

2.6 Versions of the IVR telephone banking service

The IVR services experienced in the experiment were faithful replicas of the commercial IVR telephone banking service used by these customers of the case bank. This requires users to go through a security procedure whereby they enter their account details and two random digits from a secret security number (personas with fictitious customer account details for dummy accounts were provided for use in the experiment) before encountering a menu of options.

In the experiment, for calls to the existing IVR telephone banking dialogue (condition (1) above) transactions are confirmed with the spoken message “Thanks, your money has been transferred”. For calls to condition (2) above, the existing IVR service was extended with the new confirmation messages after a transaction “The balance of your current account is now < amount here >”. For calls to condition (3), which involved an SMS message, both of these dialogue approaches were used (balanced between-subjects) – “We will send you a confirmation of this transaction by text message”(the version without mention of the updated balance in the IVR as per condition (1)); and “The balance of your current account is now < amount here > and we will send you a confirmation of this transaction by text message” (the version speaking out the updated balance in the IVR as per condition (2)).

An example SMS funds transfer confirmation is shown in Figure 1.

2.7 Scenarios

Participants were asked to undertake a set of scenarios such as “You want to transfer some money from your current account to your friend’s account. Call the bank and use the automated service to transfer £300 to their account”. Participants were given all of the account details and information they would need to complete the tasks.

3. Results

3.1 Customer attitudes scores

The mean overall attitude scores, computed over the 22 statements in the attitude questionnaire, for each of the four versions are shown in Table IV.

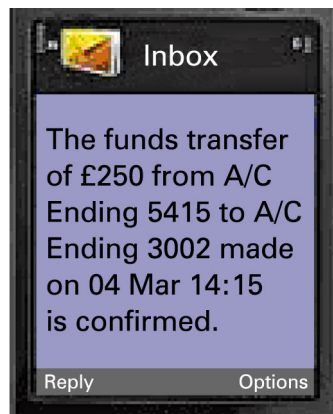


Figure 1.
Example of SMS
transaction confirmation
message

The current IVR version with separate SMS confirmation scored the highest mean attitude score. A repeated measures analysis of variance (ANOVA) was performed on the mean scores using age group, gender and IVR type (IVR with or without balance update) as between-participants factors. There was no significant main effect of version ($df = 1.96, F = 0.746, p = 0.475$) or any significant interactions due to the main between-participant variables, gender, age group. This is an interesting finding given that twice as many participants in the younger age group used SMS messaging on a daily basis than did participants in the older age group.

Comparing scores for the IVR version with SMS confirmation to the current version of the IVR service without SMS shows three usability attributes to be statistically significantly higher ($p < 0.05$) with addition of SMS confirmation, “confident transaction was completed, voice clarity and efficiency”. Comparing scores for the IVR version with both updated balance message and SMS confirmation message to the current IVR version alone, showed that the version with confirmations scored significantly higher for the attribute friendly ($p = 0.022$). Comparing scores for the IVR version with updated balance prompt to the current IVR version alone found only one attribute to be significantly higher for the version with updated balance, easy to use ($p = 0.033$).

3.2 Quality and preference

Participants were asked to rate the quality of the four versions of the service on a 0-30 point rating scale between “worst” and “best”. Table V shows the mean and standard deviation of the quality ratings for each version of the service.

There were no significant differences between the versions that involved SMS messages (univariate ANOVA) and there were no age or gender effects. The IVR with SMS confirmation message version scored significantly higher than the current IVR version, $p = 0.014$ (paired samples t -test). There was no statistically significant difference between the IVR with updated balance version and either of the versions that included SMS confirmations (paired samples t -test). The IVR with updated balance version scored significantly higher than the current IVR version alone,

Version	Mean	SD
Current IVR ($n = 110$)	5.35	0.43
Current IVR + balance update ($n = 110$)	5.36	0.44
Current IVR + SMS confirmation ($n = 56$)	5.45	0.36
Current IVR + balance update + SMS confirmation ($n = 52$)	5.42	0.45

Table IV.
Attitude scores for funds
transfer processes

Version	Mean	SD
Current IVR ($n = 109$)	17.34	7.363
Current IVR with updated balance ($n = 109$)	21.77	5.231
Current IVR with SMS confirmation ($n = 51$)	22.27	7.955
Current IVR with updated balance plus SMS confirmation ($n = 58$)	23.04	6.321

Table V.
Quality ratings for the
alternative funds transfer
service

$p < 0.001$ (paired samples t -test). Reducing the quality rating into a rank order results in the data presented in Table VI.

One participant did not complete this question. Several participants ranked versions equally and resulting in higher than 110 responses since in these cases scores were added to both versions involved. The rankings for the versions with SMS confirmations involved smaller number of participants due to the between-participants comparison. There were few differences between the rankings for the two versions incorporating SMS confirmations. More participants rated the IVR version with both the balance update prompt and SMS confirmation second than those who just had the current IVR version with SMS confirmation. Table VII shows the split between the three options each participant experienced, showing a clear preference for the version with SMS confirmation (both with and without the updated balance prompt).

3.3 Qualitative analysis

Some 67 per cent of participants gave positive views about the use of SMS confirmations as “a good idea”, “quite helpful” or “excellent”, “it provides extra confirmation and reassurance that the transaction had taken place”, “it’s a written record”. Some 18 per cent of participants had negative views about the text message confirmation, mostly security concerns.

Asked to comment about about the IVR service with a balance update prompt, most participants (75 per cent) were positive about the addition of this information commenting that it was a “good idea”, “useful”, “informative” and a “good and helpful feature”. Some 15 per cent also specifically mentioned being reassured that the transaction had gone through as planned. However, some 7 per cent of the participants thought this prompt was unnecessary, commenting that it “feels irrelevant if you didn’t want to know it”.

A total of 99 per cent of the participants judged that the information provided by text messages was clear. Asked whether the SMS confirmation should be automatic, or whether they would like the choice to get the confirmation message, 62 per cent of participants wanted to be offered the choice. Another 36 per cent wanted it to be

Table VI.
Rank order for designs
(split between
experiences)

Version	Current IVR		Current IVR + balance update		Current IVR + SMS		Current IVR + balance + SMS	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Best	14	13	35	32	34	67	34	63
2nd best	25	23	60	55	4	8	17	29
3rd best	70	64	14	13	13	12	7	12
Total	109		109		51		58	

Table VII.
Rank order for designs
(split between three
experiences)

Ranked best overall	<i>n</i>	%
Current IVR service	14	12.8
Current IVR with balance update	35	32.1
Either SMS confirmation option	68	62.4

automatically sent by the automated telephone service. This was a significant bias in favour of having the choice, $p = 0.008$ (binomial test).

When asked if they wanted to have the option of entering the phone number on which they would like to receive the SMS confirmation, 50 per cent of participants wanted to be able to do this. They commented that they may have multiple phones, or have changed, lost or had their phone stolen and therefore needed to be able to enter the correct details and ensure the texts arrived to the correct phone: “so you can chose which phone it goes to”. Some also commented that this option would be preferable and helpful. However, nearly as many participants commented that they did not think that this would be a good idea, mainly their concerns were about security, about repetition and lengthening the phone call, that it would make the process too complicated, “it would slow it down, a hassle”.

Offering the choices of sending the SMS message and/or input of the mobile number raised some additional security issues, such as how secure it would be to input the phone number at the same time as performing the transaction within the IVR, and how long this would take, how prone to errors the process might be. The option of pre-registering a phone number and alternative numbers might be worth investigating. In addition, there is scope for customers to individually indicate their preferences as to whether texts would be automatic or offer a choice of confirmation process. These options show that there is scope for further research on how such services might be implemented and used securely in practice and that, generally, customers needed information on the security of using these services with their mobile phones and text messaging.

Given that the scenarios in the experiment all dealt with confirmations following funds transfer transactions which were initiated by the customer, participants were asked to consider which channels (SMS, letter, phone call or no confirmation) they would prefer the bank to use for confirmations about other banking services. Most participants preferred confirmations to be either via SMS or letter. Letter confirmation was slightly more popular overall, and more preferred for change of address confirmations (71 per cent), complaints handling (62 per cent), PIN changes (64 per cent), new product application progress updates (55 per cent) and setting up new payee or funds transfer arrangements (46 per cent). SMS confirmation was the preferred option for funds transfer transactions (67 per cent), change of phone number confirmations (43 per cent), large credits or one-off debits (46 per cent and 50 per cent), overseas transactions (56 per cent) and debit card purchases over the internet (55 per cent).

4. Discussion

It was anticipated that there would be differences in customer attitudes towards the three different versions of the IVR telephone banking service, but this did not prove to be the case. Based on the questionnaire results overall, attitudes were the same whether or not the participant received an SMS confirmation after a transaction (*H0-1*). Overall, SMS confirmations did increase scores for the attributes “confident transaction was completed”, “voice clarity” and “efficiency” compared to the existing IVR version without confirmation. This was not the case for the version of the IVR with updated balance. However, when measured with the quality metric, the existing IVR version without confirmation was rated significantly lower than the versions with SMS confirmation and lower than the version of the IVR with updated balance. There were no differences between the versions with SMS confirmation and the IVR version with

updated balance, but reducing the quality ratings to rank order preferences indicated a preference for the versions with SMS confirmations (*H0-2*). Customers clearly judged the utility of a version that confirms the transaction to be higher than one that does not. From a management decision point of view, whilst there is evidence that customers would prefer use of SMS and usability data confirm that SMS would boost confidence that transactions had been completed, the fact that there was no significant difference in quality scores between the IVR with confirmation added into the call flow, and the IVR with SMS confirmation, was seen as limiting the business case argument, given that the addition of transaction confirmations in the call flow was a cost-effective first step and operational performance could be monitored before addressing the move to SMS confirmations.

From the qualitative comments made by the participants it is clear that some form of confirmation is considered to be a good idea, whether it is an SMS confirmation or an updated balance within the IVR. Participants were positive about an SMS confirmation and the confidence and reassurance it gave, but this was similar picture for an updated balance in the call. A minority (18 per cent) of customers expressed concerns about security regarding SMS confirmations.

The scope for CRM and the ability to send SMS confirmations after banking transactions can be seen as one of this channel's strengths, especially for monetary transactions on an account, where instant confirmation is required and indeed, the results here seem to suggest that for transactions involving payments SMS feedback is desirable, likely to be because of the speed and convenience of SMS. However, a recent survey found that customers still prefer traditional print mail compared to e-mail communication from their bank (InfoPrint, 2007), and more would revert back to print if it had less of an environmental impact. Other research (Liljander *et al.*, 2007) found that customers for an airline had a "take it or leave" it response to mobile CRM.

No effects on usability for customer age group were found (*H0-3*); unlike in previous research (Peevers *et al.*, 2008). This may suggest usability issues only arise when older participants have to interact with the mobile handset more and instigate the transaction in a pull service. For a push service with actions instigated by the bank, users do not have to interact so much by composing, keying and sending an SMS – they just receive the SMS. It has been argued that some older users of mobile phones can panic when they receive an SMS because they find it intimidating to retrieve the message (Kurniawan, 2008), but this was not indicated in the data presented here. The use of SMS in this context is also more similar to SMS use in general, whereas SMS transactions (Peevers *et al.*, 2008) are a more novel use of SMS.

Although the experiment method described in this paper attempts as much as possible to create a realistic scenario in which the user experiences the various version of the service, with participants assuming personae and scenarios to undertaking prescribed (realistic) tasks, the limitation remains that real-world use of a telephone banking service may differ from the experimental condition in the tasks that customers are attempting when they call and therefore, how well the results transfer into the real world. The confirmation text was programmed to arrive with a delay of 30 seconds which might not always happen in real life.

The experiment was set in ideal, quiet conditions. Confirmation within the IVR call flow may not prove so effective in noisy/out and about environments.

The effectiveness of the service would also depend on the willingness of customers to supply their mobile number to the bank, and the bank keeping accurate records of this over time as numbers change. Also, attitudes might be different when the customer's own account and own money is involved.

Participants were asked to make only one funds transfer with each version in the experiment. A further study involving repeated use to account for learning and familiarisation effects would be of interest.

The experiment failed to deliver any data on the effectiveness of either confirmation method in terms of avoiding next calls (behaviour).

From a management viewpoint, the data reported here fail to provide evidence to support a convincing business case for deployment of SMS as a confirmation channel. In consequence, the business case was only developed by the case bank as far as inclusion of transaction confirmation within the IVR call itself, and not extended to use of SMS. With increasing customer mobility the role of SMS can be expected to continue to gain momentum and importance as a business tool for CRM. An important consideration is that in the short- to medium-term, the mobile channel can be expected to become a key part of multi-channel strategies emerging for the banking sector, establishing the need for more research in the field.

Note

1. The case bank for this research is one of the UK's high street banks.

References

- Aladwani, A.M. (2001), "Online banking: a field study of drivers, development challenges, and expectations", *International Journal of Information Management*, Vol. 21 No. 3, pp. 213-25.
- Anderson, E.W. and Mittal, V. (2000), "Strengthening the satisfaction-profit chain", *Journal of Service Research*, Vol. 3 No. 2, pp. 107-20.
- Brown, I., Cajee, Z., Davies, D. and Stroebel, S. (2003), "Cell phone banking: predictors of adoption in South Africa – an exploratory study", *International Journal of Information Management*, Vol. 23 No. 5, pp. 381-94.
- Crosby, L.A. and Johnson, S.L. (2001), "Technology: friend or foe to customer relationships?", *Marketing Management*, Vol. 10 No. 4, pp. 10-11.
- Ennew, C.T. and Binks, M.R. (1999), "Impact of participative service relationships on quality, satisfaction and retention: an exploratory study", *Journal of Business Research*, Vol. 46 No. 2, pp. 121-32.
- Faulkner, X. and Culwin, F. (2005), "When fingers do the talking: a study of text messaging", *Interacting with Computers*, Vol. 17, pp. 167-85.
- Fjermestad, J. and Romano, N.C. Jr (2003), "Electronic customer relationship management: revisiting the general principles of usability and resistance – an integrative implementation framework", *Business Process Management Journal*, Vol. 9 No. 5, pp. 572-91.
- Fornell, C. and Wernerfelt, B. (1987), "Defensive marketing strategy by customer complaint management: a theoretical analysis", *Journal of Marketing Research*, Vol. 24, pp. 337-46.
- Grabner-Krauter, S. and Kaluscha, E.A. (2003), "Empirical research in on-line trust: a review and critical assessment", *International Journal of Human Computers Studies*, Vol. 58 No. 6, pp. 783-812.

- Helenius, J. and Liljander, V. (2005), "Developing brand assets with wireless devices", in Clarke, I. III and Flatherty, T.B. (Eds), *Advances in Electronic Marketing*, Idea Group, Hershey, PA, pp. 176-92.
- Hooi Ting, D. (2004), "Service quality and satisfaction perceptions: curvilinear and interaction effect", *International Journal of Bank Marketing*, Vol. 22 No. 6, pp. 407-20.
- InfoPrint (2007), InfoPrint Solutions Company, *Marketers Are still not Targeting Their Customers Effectively*, press release, available at: www.infoprintsolutionscompany.com/internet/wwwsites.nsf/vwwebpublished/ai_pr030408_marketing_survey_xn
- Jamal, A. and Naser, K. (2002), "Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking", *International Journal of Bank Marketing*, Vol. 20 No. 4&5, pp. 146-61.
- Jarvenpaa, S., Lang, K.R., Takeda, Y. and Tuunainen, V.K. (2003), "Mobile commerce at crossroads: an international focus group study of users of mobile handheld devices and services", *Communications, ACM*, Vol. 46 No. 12, pp. 41-4.
- Johnston, R. and Mehra, S. (2002), "Best-practice complaint management", *Academy of Management Journal*, Vol. 16 No. 4, pp. 145-54.
- Kanniainen, L. (2010), "Alternatives for banks to offer secure mobile payments", *International Journal of Bank Marketing*, Vol. 28 No. 5, pp. 433-44.
- Kim, J. and Moon, J.Y. (1998), "Designing emotional usability in customer interfaces trustworthiness of cyber-banking system interfaces", *Interacting with Computers*, Vol. 10, pp. 1-29.
- Kim, K. and Prabhakar, B. (2000), "Initial trust, perceived risk, and the adoption of internet banking", *Proceedings of the 21st International Conference on Information Systems, 10-13 December 2000, Brisbane*, pp. 537-543.
- Koenig-Lewis, N., Palmer, A. and Moll, A. (2010), "Predicting young consumers' take up of mobile banking services", *International Journal of Bank Marketing*, Vol. 28 No. 5, pp. 410-32.
- Kurniawan, S. (2008), "Older people and mobile phones: a multi-method investigation", *International Journal of Human-Computer Studies*, Vol. 66 No. 12, pp. 889-901.
- LaLomia, M.J. and Sidowski, J.B. (1990), "Measurements of computer satisfaction, literacy, and aptitudes: a review", *International Journal of Human-Computer Interaction*, Vol. 2 No. 3, pp. 231-53.
- Lam, J. and Chan, S.S. (2003), "Exploring CRM implementation on the internet and mobile channels", paper presented at seminar, School of Computer Science, Telecommunication and Information Systems, DePaul University, Chicago, IL.
- Landauer, T.K. (1988), "Research methods in human-computer interaction", in Helenader, M. (Ed.), *Handbook of Human-Computer Interaction*, North-Holland, Amsterdam, pp. 905-28.
- Laukkanen, T. (2007), "Internet vs mobile banking: comparing customer value perceptions", *Business Process Management Journal*, Vol. 13 No. 6, pp. 788-97.
- Laukkanen, T. and Kiviniemi, V. (2010), "The role of information in mobile banking resistance", *International Journal of Bank Marketing*, Vol. 28 No. 5, pp. 372-88.
- Laukkanen, T. and Lauronen, J. (2005), "Consumer value creation in mobile banking services", *International Journal of Mobile Communications*, Vol. 3 No. 4, pp. 325-8.
- Lee, K.C. and Chung, N. (2009), "Understanding factors affecting trust in and satisfaction with mobile banking in Korea: a modified Delone and Mclean's model perspective", *Interacting with Computers*, Vol. 21 Nos 5-6, pp. 385-92.

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- Lee, M.S.Y., McGoldrick, P.F., Keeling, K.A. and Doherty, J. (2003), "Using ZMET to explore barriers to the adoption of 3G mobile banking services", *International Journal of Retail & Distribution Management*, Vol. 31 No. 6, pp. 340-8.
- Leverin, A. and Liljander, V. (2006), "Does relationship marketing improve customer relationship satisfaction and loyalty?", *International Journal of Bank Marketing*, Vol. 24 No. 4, pp. 232-51.
- Likert, R. (1932), "A technique for the measurement of attitudes", *Archives of Psychology*, Vol. 22 No. 140, pp. 1-55.
- Liljander, V., Polsa, P. and Forsberg, K. (2007), "Do mobile CRM services appeal to loyalty program customer", *International Journal of E-business Research*, Vol. 3 No. 2, pp. 24-40.
- Lin, H.-H. and Wang, Y.-S. (2006), "An examination of the determinants of customer loyalty in mobile commerce contexts", *Information and Management*, Vol. 43 No. 3, pp. 271-82.
- Luarn, P. and Lin, H. (2005), "Toward an understanding of the behavioral intention to use mobile banking", *Computers in Human Behavior*, Vol. 21 No. 6, pp. 873-91.
- Martin, O. (2010), "Texting was never actually designed for the consumer market", *The Guardian*, available at: www.guardian.co.uk/business/2010/jan/01/texting-never-designed-for-consumers
- (The) Mobile Data Association (2009), *The Q4 2008 UK Mobile Report*, press release, 13 February, available at: www.themda.org/mda-press-releases/the-q4-2008-uk-mobile-trends-report.php
- Mort, G.S. and Drennan, J. (2005), "Marketing m-services: establishing a usage benefit typology related to mobile user characteristics", *Database Marketing & Customer Strategy Management*, Vol. 12 No. 4, pp. 327-41.
- Nysveen, H., Pedersen, P.E., Thorbjørnsen, H. and Berthon, P. (2005), "Mobilizing the brand. The effects of mobile services on brand relationships and the main channel use", *Journal of Service Research*, Vol. 7 No. 3, pp. 257-76.
- O'Loughlin, D., Szmigin, I. and Turnball, P. (2004), "From relationships to experiences in retail financial services", *International Journal of Bank Marketing*, Vol. 22 No. 7, pp. 522-39.
- Okazaki, S. (2005), "New perspective on m-commerce research", *Journal of Electronic Commerce Research*, Vol. 6 No. 3, pp. 160-4.
- Ornella, P. and Stephanie, B. (2006), "Universal designs for mobile phones: a case study", *Computer Human Interaction 2006*, Work in Progress, Quebec.
- Peevers, G. and McInnes, F. (2009), "Laboratory studies", in Love, S. (Ed.), *Handbook of Mobile Technology Research Methods*, Nova, Hauppauge, NY.
- Peevers, G., Douglas, G. and Jack, M.A. (2008), "A usability comparison of three alternative message formats for an SMS banking service", *International Journal of Human-Computer Studies*, Vol. 66 No. 2, pp. 113-23.
- Peevers, G., McInnes, F., Morton, H., Matthews, A. and Jack, M.A. (2009), "The mediating effects of brand music and waiting time updates on customers' satisfaction with a telephone service when put on-hold", *International Journal of Bank Marketing*, Vol. 27 Nos 2/3, pp. 202-17.
- Pousttchi, K. and Schurig, M. (2004), "Assessment of today's mobile banking applications from the view of customer requirements", *Proceedings of the 37th Hawaii International Conference on System Sciences, IEEE, Big Island, January*.
- Richardson, A. (2005), "Turning transactions into relationships: metrics for usability in the financial services sector", PhD thesis, University of Edinburgh, Edinburgh.

- Riquelme, H.E. and Rios, R.E. (2010), "The moderating effect of gender in the adoption of mobile banking", *International Journal of Bank Marketing*, Vol. 28 No. 5, pp. 328-41.
- Root, R.W. and Draper, S. (1983), "Questionnaires as a software evaluation tool", *Proceedings of CHI 83*, ACM, New York, NY.
- Rumpa, G. (2005), "Are you banking more on your mobile?" *Times of India*, 6 February, available at: <http://timesofindia.indiatimes.com/articleshow/1013140.cms>
- Sillence, E. and Baber, C. (2004), "Integrated digital communities: combining and competition", *Interacting with Computers*, Vol. 16 No. 1, pp. 93-113.
- Smith, W.R. (1956), "Product differentiation and market segmentation as an alternative marketing strategies", *Journal of Marketing*, Vol. 21 No. 1, pp. 3-8.
- Storbaka, K. (1997), "Segmentation based on customer profitability – retrospective analysis of retail bank customers bases", *Journal of Marketing Management*, Vol. 13 No. 5, pp. 479-92.
- Suh, B. and Han, I. (2002), "Effect of trust on customer acceptance of internet banking", *Electronic Commerce Research and Applications*, Vol. 1 No. 3, pp. 247-63.
- Suoranta, M. (2003), "Adoption of mobile banking in Finland", *Jyvaskyla Studies in Business and Management* 28, PhD, Jyvaskyla.
- Tiwari, R., Buse, S. and Herstatt, C. (2007), "Mobile services in banking sector. The role of innovative business solutions in generating competitive advantage", *Proceedings of the 8th International Research Conference on Quality, Innovation and Knowledge Management, New Delhi, 11-14 February*.
- Walsh, S., Gilmore, A. and Carson, D. (2004), "Managing and implementing simultaneous transaction and relationship marketing", *International Journal of Bank Marketing*, Vol. 22 No. 7, pp. 468-83.
- Weir, C.S. (2008), "Investigating the relationship between usability, preferences and usage intentions when banking online", PhD thesis, University of Edinburgh, Edinburgh.
- Weir, C.S., Anderson, J.A. and Jack, M.A. (2006), "On the role of metaphor and language in design of third party payments in e-banking: usability and quality", *International Journal of Human-Computer Studies*, Vol. 64 No. 8, pp. 771-85.
- Weir, C.S., McKay, I. and Jack, M.A. (2007), "Functionality and usability in design for e-statements in e-banking services", *Interacting with Computers*, Vol. 19 No. 2, pp. 241-56.
- Weir, C.S., Douglas, G., Carruthers, M. and Jack, M.A. (2009a), "User perceptions of security, convenience and usability for e-banking authentication tokens", *Journal of Computers and Security*, Vol. 28 No. 1, pp. 47-62.
- Weir, C.S., Douglas, G., Richardson, T. and Jack, M.A. (2009b), "Usable security: user preferences for authentication methods in e-banking and the effects of experience", *Interacting with Computers*, Vol. 22 No. 3, pp. 153-64.
- Zeithaml, V.A., Rust, R.T. and Lemon, K.N. (2001), "The customer pyramid: creating and serving profitable customers", *California Management Review*, Vol. 43 No. 4, pp. 118-42.

About the authors

G. Peevers holds a BA (Hons) in Artificial Intelligence and MSc in HCI, both from the University of Sussex, UK. He has been a Research Fellow at Edinburgh University since April 2004. His main interest is in usability and HCI in the banking sector. His thesis is about investigating applications of mobile banking. G. Peevers is the corresponding author and can be contacted at: garth.peevers@ed.ac.uk

G. Douglas graduated in 1996 from the University of Edinburgh with a BSc (Hons) in Mathematical Physics. He completed a PhD in 1999, again at the University of Edinburgh. His

work at CCIR includes studies of e-banking web portals, mobile services (including SMS/MMS banking), contact centre technologies, online self-help financial tools, eCRM solutions and two factor authentication methods.

D. Marshall graduated from the University of Edinburgh in 1995 with a MEng (Hons) degree in Electronics. His MEng project with GEC Plessey Semiconductors (Swindon) involved looking at demodulation and decoding techniques for digital radios. His work has included user trials on automated telephone services, EPGs and interactive television, and alphanumeric data entry techniques.

M.A. Jack is Director of CCIR. Research concerns the need to optimise use of new technologies for mass-market access to consumer channels, such as telephone and internet banking, where his research on usability engineering is being used to create improved user interface designs for these mass channels. An author of some 240 papers and three textbooks, Professor Jack is a Fellow of the Royal Society of Edinburgh and a Fellow of the Institution of Electrical Engineers.

ATTACHMENT B

Mobile Travel Services Used by Business Travelers and/or Valuable to Corporate Travel Managers Worldwide, March 2008 (% of respondents)

	Used	Valuable
Receiving airline alerts	51%	98%
Checking into flights	34%	95%
Receiving security alerts	30%	98%
Communication with travel manager	27%	87%
Getting GPS directions	22%	92%
Changing travel reservations	16%	88%
Paperless boarding passes	15%	88%
Accessing concierge services	12%	76%
Receiving road alerts	8%	80%
Booking preferred suppliers	6%	75%
Paperless receipts	3%	55%
Mobile expense reporting	3%	73%
Checking into/out of hotels	2%	79%
Paying for services	2%	54%
Don't know	30%	-

Note: n=72

Source: Amadeus and Association of Corporate Travel Executives (ACTE), "Upwardly Mobile: The Next Step for Travel Management," July 2008

Top Features of In-Store Mobile Apps According to US Smartphone Owners, Feb 2012

% of respondents

Mobile coupons

69%

Store information (location, hours, directions, etc.)

34%

Mobile self-checkout

31%

Digital receipts

27%

Source: AisleBuyer, "The Mobile Shopping Survey Series," March 23, 2012

Mobile Features that Luxury Sales Professionals Can Use to Enhance In-Store Shopping According to US Affluent Smartphone Owners, Q1 2012

% of respondents

Details about the product

53%

Ability to check for sizes and availability at other stores

50%

In-store product inventory

47%

Emailing a receipt

41%

Payment and checkout

38%

Access to reviews of products

34%

Product customization

27%

Information about past purchases

26%

Recommends similar products

25%

Note: n=367 ages 21+ with a minimum gross annual income of \$150,000
Source: Luxury Institute and Plastic Mobile, "Mobile Apps And Commerce for Luxury Brands," April 24, 2012

ATTACHMENT C

United States Senate

WASHINGTON, DC 20510

April 13, 2012

The Honorable Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Chairman Genachowski:

We write in support of the petition for declaratory ruling around a narrow issue. The question is whether or not it is a violation of the Telephone Consumer Protection Act (TCPA) rules to send a single, immediate, confirmatory message after a consumer has opted out of being contacted through text messages in the future. We do not believe that such a message should constitute a breach of the TCPA.

We understand that in the industry it is considered a best practice to send an immediate confirmation reply message sent when a consumer sends a request to stop receiving future text messages. That ensures that the consumer has a "receipt" for their opt-out request and ensures that the consumer knows they will not receive any future messages from a particular entity. It is also necessary in case the consumer sent the request in error or did not actually make the request himself.

As you know, we take very seriously the role of government in promoting consumer protection, privacy, and competition. The FCC must remain vigilant as new technologies and business methods enter the market that deceive consumers, treat them unfairly, or are created to thwart competition rather than create value.

But on this narrow issue, where a misinterpretation of the law could hurt both consumers and entrepreneurs, a definitive ruling by the FCC stating that a confirmatory text message is not only allowable under existing TCPA rules, but is also encouraged, will help provide certainty for everyone engaged in mobile commerce. Confirming a request to cease future text messages is not harmful to consumers, it is useful. We ask that as you apply your stringent criteria in deciding this matter that you take into consideration all applicable rules, regulations and laws.

Sincerely,



John F. Kerry



Scott Brown